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November 17, 1999

Box PATENT APPLICATION  
Assistant Commissioner for Patents  
Washington, D.C. 20231

Re: New U.S. Patent Application  
Applicant : Kevin SCHMIDT  
Title : PORTABLE DISPENSING BOTTLE WITH  
DISSOLVABLE WAX PLUG AT INLET  
My File : 337/1/003

Certificate of Mailing By Express Mail Under 37 CFR 1.10

Express Mail "Mailing Label No.": EJ639251686US

Date of Deposit : NOVEMBER 17, 1999

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Richard M. Goldberg  
(Name of Registered Representative)

Richard M. Goldberg NOVEMBER 17, 1999  
(Signature and Date)

Dear Sirs:

Transmitted herewith for filing in the U.S. Patent and Trademark Office is a new U.S. patent application including:

- (a) FORM PTO/SB/05 (4/98) - Utility Patent Application Transmittal;
- (b) FORM PTO/SB/17 (6/99) - Fee Transmittal;
- (c) Application of seventeen (17) pages, with twenty (20) claims;
- (d) Two (2) sheets of drawings (Figs. 1-7);
- (e) Declaration and Power of Attorney;


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November 17, 1999  
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- (f) Verified Statement Claiming Small Entity Status - Independent Inventor;
- (g) Information Disclosure Statement; 2 sheets of Form PTO-1449, and with 16 references; and
- (h) Check No. 5253 in the amount of \$380.00.

The Commissioner is authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 07-1524.

Respectfully submitted,

  
Richard M. Goldberg  
Registration No. 28,215

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PTO/SB/05 (4/98)  
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<b>UTILITY PATENT APPLICATION TRANSMITTAL</b> <small>(Only for new nonprovisional applications under 37 C.F.R. § 1.53(b))</small>	Attorney Docket No.	337/1/003
	First Inventor or Application Identifier	Kevin SCHMIDT
	Title	PORTABLE DISPENSING BOTTLE WITH DIS-SOLVABLE WAX PLUG AT INLET
	Express Mail Label No.	EJ639251686US

<b>APPLICATION ELEMENTS</b> <small>See MPEP chapter 600 concerning utility patent application contents.</small>	<b>ADDRESS TO:</b> Assistant Commissioner for Patents Box Patent Application Washington, DC 20231
1. <input checked="" type="checkbox"/> * Fee Transmittal Form (e.g., PTO/SB/17) <small>(Submit an original and a duplicate for fee processing)</small>	5. <input type="checkbox"/> Microfiche Computer Program (Appendix)
2. <input checked="" type="checkbox"/> Specification <small>[Total Pages 17]</small> <small>(preferred arrangement set forth below)</small> <ul style="list-style-type: none"><li>- Descriptive title of the Invention</li><li>- Cross References to Related Applications</li><li>- Statement Regarding Fed sponsored R &amp; D</li><li>- Reference to Microfiche Appendix</li><li>- Background of the Invention</li><li>- Brief Summary of the Invention</li><li>- Brief Description of the Drawings (if filed)</li><li>- Detailed Description</li><li>- Claim(s)</li><li>- Abstract of the Disclosure</li></ul>	6. Nucleotide and/or Amino Acid Sequence Submission <small>(if applicable, all necessary)</small> <ul style="list-style-type: none"><li>a. <input type="checkbox"/> Computer Readable Copy</li><li>b. <input type="checkbox"/> Paper Copy (identical to computer copy)</li><li>c. <input type="checkbox"/> Statement verifying identity of above copies</li></ul>
3. <input checked="" type="checkbox"/> Drawing(s) (35 U.S.C. 113) <small>[Total Sheets 2]</small> <small>(Figs. 1-7)</small>	<b>ACCOMPANYING APPLICATION PARTS</b>
4. Oath or Declaration <small>[Total Pages 1]</small> <ul style="list-style-type: none"><li>a. <input checked="" type="checkbox"/> Newly executed (original or copy)</li><li>b. <input type="checkbox"/> Copy from a prior application (37 C.F.R. § 1.63(d)) <small>(for continuation/divisional with Box 16 completed)</small><ul style="list-style-type: none"><li>i. <input type="checkbox"/> <b>DELETION OF INVENTOR(S)</b> Signed statement attached deleting inventor(s) named in the prior application, see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).</li></ul></li></ul>	7. <input type="checkbox"/> Assignment Papers (cover sheet & document(s))
<b>* NOTE FOR ITEMS 1 &amp; 13: IN ORDER TO BE ENTITLED TO PAY SMALL ENTITY FEES, A SMALL ENTITY STATEMENT IS REQUIRED (37 C.F.R. § 1.27), EXCEPT IF ONE FILED IN A PRIOR APPLICATION IS RELIED UPON (37 C.F.R. § 1.28).</b>	8. <input type="checkbox"/> 37 C.F.R. § 3.73(b) Statement <input type="checkbox"/> Power of Attorney <small>(when there is an assignee)</small>
	9. <input type="checkbox"/> English Translation Document (if applicable)
	10. <input checked="" type="checkbox"/> Information Disclosure Statement (IDS)/PTO-1449 <small>[16]</small> Copies of IDS Citations
	11. <input type="checkbox"/> Preliminary Amendment
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	13. <input checked="" type="checkbox"/> * Small Entity Statement(s) <input type="checkbox"/> Statement filed in prior application, Status still proper and desired <small>(PTO/SB/09-12)</small>
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16. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No: \_\_\_\_\_

Prior application information: Examiner: \_\_\_\_\_ Group / Art Unit: \_\_\_\_\_

**For CONTINUATION or DIVISIONAL APPS only:** The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 4b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**17. CORRESPONDENCE ADDRESS**

☐ Customer Number or Bar Code Label (Insert Customer No. or Attach bar code label here) or ☐ Correspondence address below

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Name (Print/Type)	Richard M. Goldberg	Registration No. (Attorney/Agent)	28,215
Signature	<i>Richard M. Goldberg</i>	Date	NOV. 17, 1999

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**PORTABLE DISPENSING BOTTLE WITH  
DISSOLVABLE WAX PLUG AT INLET**

BACKGROUND OF THE INVENTION

The present invention relates generally to bottles, and more particularly, to a bottle having a wax plug in the neck thereof which dissolves in the presence of heat in order to  
5 dispense the contents in the bottle.

Dishwashers have a tendency to accumulate calcium, lime, scale, etc. over time on the walls thereof, particularly in areas having hard water. In many dishwashers, there is a short duration pump cycle, for  
10 example, for fifteen seconds, in which all liquid contents in the dishwasher are pumped out, prior to starting the cleaning operation. Therefore, any cleaning liquid placed in the dishwasher at the start of operation is merely pumped out and does not clean the walls of the dishwasher.

15 Although compartments are provided for a viscous dishwashing liquid or a dishwashing powder, these compartments are not suitable for holding a non-viscous cleaning liquid for cleaning calcium, lime, scale, etc. from the dishwasher walls.

20 Therefore, there is a need for forming a way to dispense the non-viscous liquid into the dishwasher during the wash cycle, without opening the dishwasher at this time and pouring the cleaning liquid into the dishwasher.

SUMMARY OF THE INVENTION

Accordingly, it is an object of the present invention to provide a portable dispensing bottle with a dissolvable wax plug at the inlet that overcomes the aforementioned  
5 problems.

It is another object of the present invention to provide a portable dispensing bottle with a dissolvable wax plug in which the wax plug dissolves during the wash cycle in the presence of heated water.

10 It is still another object of the present invention to provide a portable dispensing bottle with a dissolvable wax plug that is easy and economical to manufacture and use.

In accordance with an aspect of the present invention, a dispensing bottle including a hollow main body; a neck  
15 having an opening in open communication with an interior of the main body; a wax plug in the neck, the wax plug made of a wax material that melts at a predetermined temperature; and a removable closure cap in covering relation to the opening. Further, the neck has an inner surface with one of  
20 a lip and a groove for capturing the wax plug to prevent the wax plug from falling into the main body.

In accordance with another aspect of the present invention, a dispensing bottle includes a hollow main body having an opening; a wax plug made of a wax material that  
25 melts at a predetermined temperature; and a retaining plug

positioned in the opening for holding the wax plug in the opening of the bottle.

The hollow main body includes a neck having the opening in open communication with an interior of the main body; and  
5 the retaining plug is positioned in the neck for holding the wax plug in the neck of the bottle. A removable closure cap is in covering relation to the opening.

The retaining plug comprises an annular member including an outer facing peripheral surface, and an inner  
10 facing peripheral surface defining a center opening in which the wax plug is held.

In one embodiment, an inner facing surface of the opening is provided with one of a lip and a groove, and the outer facing peripheral surface of the retaining plug is  
15 formed with the other of the lip and the groove for mating with the one of the lip and the groove in the opening.

In another embodiment, an inner facing surface of the opening is provided with one of a groove and lip, and the outer facing peripheral surface of the retaining plug is  
20 formed with upper and lower tapered portions that form a substantially V-shape in cross section, and a meeting portion of the upper and lower tapered portions mates with the one of the groove and lip in the opening, to hold the retaining plug in the opening.

25 Also, the inner facing peripheral surface includes one of an inwardly extending lip and a groove, and the wax plug

includes an outwardly facing peripheral surface with the other of the inwardly extending lip and a groove that fits within the one of the inwardly extending lip and groove.

The retaining plug includes an outwardly extending  
5 flange which rests on an upper edge of the bottle in surrounding relation to the opening when the retaining plug is positioned in the opening.

The wax plug is made from a paraffin wax, and preferably, a red paraffin wax having a melting temperature  
10 of about 125°F.

In accordance with still another aspect of the present invention, a dispensing bottle includes a hollow main body; a neck having an opening in open communication with an interior of the main body; a wax plug in the neck, the wax  
15 plug made of a wax material that melts at a predetermined temperature; and an arrangement for capturing the wax plug in the neck.

The arrangement includes a retaining plug positioned in the opening for holding the wax plug in the neck of the  
20 bottle. There is also a removable closure cap in covering relation to the opening in the neck.

The above and other objects, features and advantages of the present invention will become readily apparent from the following detailed description thereof which is to be read  
25 in connection with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a perspective exploded view of a portable dispensing bottle according to the present invention, with the wax plug removed;

5 Fig. 2 is a top plan view of the retainer ring;

Fig. 3 is a cross-sectional view of the retainer ring, with the wax plug therein, taken along line 3-3 thereof;

Fig. 4 is a side elevational view of the wax plug;

Fig. 5 is a top plan view of a retainer ring according  
10 to another embodiment of the present invention;

Fig. 6 is a cross-sectional view of the retainer ring of Fig. 5, taken along line 6-6 of Fig. 5; and

Fig. 7 is an enlarged cross-sectional view of a portion of the retainer ring of Fig. 5, taken along line 7-7 of Fig.

15 5.

DETAILED DESCRIPTION

Referring to the drawings in detail, a portable dispensing bottle 10 according to the present invention  
20 includes a hollow main body 12 having at least one side wall 14, a closed bottom wall 16 and a top wall 18 that leads into a reduced diameter annular neck 20 that is in open communication with the interior of main body 12. As is conventional, neck 20 has external threads 22 for threadedly  
25 receiving a closure cap 24 having mating internal threads (not shown).



In accordance with the present invention, a retaining plug 26 is held within neck 20 for holding a dissolvable wax plug 28. Thus, retaining plug 26 will have a height and diameter in dependence upon the size of neck 20. An appropriate height can be, for example, 0.2 to 0.4 inch and an appropriate outside diameter can be, for example, 1.0 to 1.5 inches.

Specifically, retaining plug 26 is formed by an annular member 30 that forms a liquid tight seal with neck 20 and has an outer facing peripheral surface 32, an inner facing peripheral surface 34 defining a center opening 35, a planar upper surface 36 and a planar lower surface 37. An arrangement is provided to releasably capture retaining plug 26 in neck 20. In this regard, as shown in Fig. 1, the inner surface of neck 20 includes a first inwardly directed annular lip 42 at the upper edge thereof, and a second inwardly directed annular lip 44 spaced below lip 42, so as to define an annular groove 46 therebetween. The outer facing peripheral surface 32 of retaining ring 26 is formed with an outwardly extending annular lip 48 spaced slightly below upper surface 36 thereof. Thus, when retaining ring 26 is inserted into annular neck 20, and because of the material of retaining plug 26, some deformation takes place to permit annular lip 48 to fit and be captured within groove 46. In order to aid in this fit, outer facing

peripheral surface 32 is preferably tapered inwardly at a lower portion 32a thereof, below annular lip 48.

In addition, to prevent retaining plug 26 from accidentally falling into main body 12, an outwardly  
5 extending flange 50 is provided coplanar and contiguous with planar upper surface 36. Thus, when annular lip 48 fits within groove 46, outwardly extending flange 50 seats upon the upper edge of neck 20.

It will be appreciated that retaining plug 26 can be  
10 made from various materials, such as plastic, rubber, etc. Further, although the aforementioned capture arrangement for retaining plug 26 is preferred, retaining plug 26 can merely form a friction fit within the inner surface of neck 20. In such case, first inwardly directed annular lip 42, second  
15 inwardly directed annular lip 44, annular groove 46, and outwardly extending annular lip 48 would be eliminated.

In order to prevent wax plug 28 from falling into main body 12, it is preferable that another capture arrangement be provided in retaining plug 26. For example, inner facing  
20 peripheral surface 34 can include an inwardly extending annular lip 52. In a forming operation, melted wax is poured into center opening 35 of retaining plug 26 and permitted to harden. As a result, as shown in Fig. 4, wax plug 28 is formed as a cylindrical member with an annular  
25 groove 54 on the outer facing peripheral surface 56 thereof which is formed by and which receives inwardly extending

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annular lip 52. As a result, wax plug 28 is captured within retaining plug 26 in a liquid tight sealing manner.

Alternatively, inner facing peripheral surface 34 can include an annular groove, in which case, when wax plug 28  
5 is formed, it will include an outwardly extending annular lip that fits within the annular groove.

With the arrangement discussed above, main body 12 is filled with a liquid for cleaning scale, lime, calcium, etc. Then, with wax plug 28 hardened into retaining plug 26,  
10 retaining plug 26 is snap fit within neck 20 such that outwardly extending annular lip 48 snap fits within annular groove 46, and outwardly extending flange 50 seats on the upper edge of neck 20. Then, closure cap 24 is threadedly engaged on neck 20. Suitable sealing arrangements, such as  
15 plastic wrap, break away seals or the like (not shown), which are conventional, can be provided to prevent inadvertent removal of closure cap 24 from neck 20.

In use, closure cap 24 is removed, and bottle 10 is positioned in a dishwasher rack in an inverted orientation,  
20 that is, with neck 20 facing down. Because of retaining ring 26 and wax plug 28, a seal is provided in neck 20 to prevent the liquid contents from escaping. A normal dishwasher cycle includes a four minute pre-wash, followed by a four minute rinse with heated water in the temperature  
25 range of about 110°F - 120°F. Thereafter, a fifteen minute wash cycle is provided with the water heated further in the

temperature range of about 125°F - 145°F. This is followed by a fifteen minute rinse cycle, and then a drying cycle.

In accordance with the present invention, wax plug 28 is made from a wax material that melts or dissolves in the wash cycle. A suitable amount of wax material can be 0.5 gram. Wax plug materials can include bees' wax and synthetic bees' wax, carnauba wax, partial glycerides, polyethylene glycol (PEG), polyglycolized glycerides, fatty acids and/or esters thereof, glyceryl stearate, palmitostearate, paraffin wax, white wax, higher fats, and polymeric materials such as polyurethane, ethylmethacrylate (EMA), hydroxyethylmethacrylate (HEMA), or any other suitable material. Preferably, a red paraffin wax is used, which has a melting point of 125°F. In such case, about two minutes into the wash cycle, wax plug 28 will melt, whereby the cleaning liquid in main body 12 will flow out of neck 20 into the dishwasher in order to remove the calcium, lime, scale, etc. from the walls of the dishwasher. Of course, it will be appreciated that this occurs without any dishes, glassware or flatware in the dishwasher, since the cleaning liquid could cause damage thereto.

Referring now to Figs. 5-7, a retaining plug 26' according to another embodiment of the invention is shown in which like parts are designated by like numerals, but with a prime (') added thereto, and a detailed description of the

common parts will not be discussed in detail for the sake of brevity.

Retaining plug 26' differs from retaining plug 26 by a plurality of, for example, eight, sector shaped recesses 60' in the top thereof, separated by radially oriented dividing walls 62' which extend between outer facing peripheral surface 32' and inner facing peripheral surface 34'. This reduces the amount of material of retaining plug 26', while maintaining the necessary structural rigidity thereof.

10 In addition, rather than providing a separate outwardly extending annular lip 48, the upper portion 32b' of outer facing peripheral surface 32', which extends upwardly from tapered lower portion 32a', is also tapered inwardly. Thus, outer facing peripheral surface 32' has a V-shaped cross-  
15 sectional configuration. As examples, the taper of lower portion 32a' can be equal to an angle  $\alpha$  of approximately  $8.1^\circ$  to a vertical, and the taper of upper portion 32b' can be equal to an angle  $\beta$  of approximately  $14.3^\circ$  to a vertical. Accordingly, the annular portion 32c', where lower and upper  
20 portions 32a' and 32b' meet, is snap fit within annular groove 46 in neck 20 to hold retaining plug 26' in annular neck 20. Alternatively, the V-shape of outer facing peripheral surface 32' can be inwardly in the opposite direction, and the inner surface of neck 20 can be provided  
25 with a lip that fits therein in place of groove 46.

As a still further alternative embodiment, retaining plug 26 can be eliminated, and instead, the wax plug can be formed directly in neck 20. In such case, annular groove 46 would prevent the wax plug from falling into main body 12.

- 5 Then, after the wax plug is hardened, closure cap 24 would be threaded onto neck 20. In such case, the bottle would be filled through another portion. For example, the bottom could be open for filling purposes, and then bottom wall 16 would be inserted over the bottom opening and welded with  
10 side wall 14.

Having described specific preferred embodiments of the invention with reference to the accompanying drawings, it will be appreciated that the present invention is not limited to those precise embodiments, and that various  
15 changes and modifications can be effected therein by one of ordinary skill in the art without departing from the scope or spirit of the invention as defined by the appended claims.

WHAT IS CLAIMED IS:

1. A dispensing bottle comprising:
  - a hollow main body;
  - a neck having an opening in open communication with an interior of said main body;
  - 5 a wax plug in said neck, said wax plug made of a wax material that melts at a predetermined temperature; and
  - a removable closure cap in covering relation to the opening.
2. A dispensing bottle according to claim 1, wherein said neck has an inner surface with one of a lip and a groove for capturing said wax plug to prevent said wax plug from falling into said main body.
3. A dispensing bottle comprising:
  - a hollow main body having an opening;
  - a wax plug made of a wax material that melts at a predetermined temperature; and
  - 5 a retaining plug positioned in said opening for holding said wax plug in said opening of said bottle.
4. A dispensing bottle according to claim 3, wherein said hollow main body includes a neck having said opening in open communication with an interior of said main body; and said

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retaining plug is positioned in said neck for holding said  
5 wax plug in said neck of said bottle.

5. A dispensing bottle according to claim 4, further  
comprising a removable closure cap in covering relation to  
the opening.

6. A dispensing bottle according to claim 3, wherein said  
retaining plug comprises an annular member including:

an outer facing peripheral surface, and

an inner facing peripheral surface defining a center  
5 opening in which said wax plug is held.

7. A dispensing bottle according to claim 6, wherein an  
inner facing surface of said opening is provided with one of  
a lip and a groove, and the outer facing peripheral surface  
of said retaining plug is formed with the other of the lip  
5 and the groove for mating with said one of the lip and the  
groove in said opening.

8. A dispensing bottle according to claim 6, wherein an  
inner facing surface of said opening is provided with one of  
a groove and lip, and the outer facing peripheral surface of  
said retaining plug is formed with upper and lower tapered  
5 portions that form a substantially V-shape in cross section,  
and a meeting portion of the upper and lower tapered

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portions mates with the one of the groove and lip in said opening, to hold said retaining plug in said opening.

9. A dispensing bottle according to claim 6, wherein said inner facing peripheral surface includes one of an inwardly extending lip and a groove, and the wax plug includes an outwardly facing peripheral surface with the other of the  
5 inwardly extending lip and a groove that fits within said one of the inwardly extending lip and groove.

10. A dispensing bottle according to claim 3, wherein said retaining plug includes an outwardly extending flange which rests on an upper edge of said bottle in surrounding relation to said opening when said retaining plug is  
5 positioned in said opening.

11. A dispensing bottle according to claim 3, wherein said wax plug is made from a paraffin wax.

12. A dispensing bottle according to claim 11, wherein said wax plug is made from a red paraffin wax having a melting temperature of about 125°F.

13. A dispensing bottle comprising:  
a hollow main body;

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a neck having an opening in open communication with an interior of said main body;

- 5 a wax plug in said neck, said wax plug made of a wax material that melts at a predetermined temperature; and  
an arrangement for capturing said wax plug in said neck.

14. A dispensing bottle according to claim 13, wherein said arrangement includes a retaining plug positioned in said opening for holding said wax plug in said neck of said bottle.

15. A dispensing bottle according to claim 13, further comprising a removable closure cap in covering relation to the opening in the neck.

16. A dispensing bottle according to claim 13, wherein said retaining plug comprises an annular member including:

an outer facing peripheral surface, and

an inner facing peripheral surface defining a center

- 5 opening in which said wax plug is held.

17. A dispensing bottle according to claim 16, wherein an inner facing surface of said neck is provided with one of a lip and a groove, and the outer facing peripheral surface of said retaining plug is formed with the other of the lip and

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5 the groove for mating with said one of the lip and the groove in said neck.

18. A dispensing bottle according to claim 16, wherein an inner facing surface of said neck is provided with one of a groove and lip, and the outer facing peripheral surface of said retaining plug is formed with upper and lower tapered  
5 portions that form a substantially V-shape in cross section, and a meeting portion of the upper and lower tapered portions mates with the one of the groove and lip in said neck, to hold said retaining plug in said neck.

19. A dispensing bottle according to claim 16, wherein said inner facing peripheral surface includes one of an inwardly extending lip and a groove, and the wax plug includes an outwardly facing peripheral surface with the other of the  
5 inwardly extending lip and a groove that fits within said one of the inwardly extending lip and groove.

20. A dispensing bottle according to claim 13, wherein said wax plug is made from a paraffin wax.

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ABSTRACT OF THE DISCLOSURE

A dispensing bottle includes a hollow main body; a neck having an opening in open communication with an interior of the main body and an inner facing surface provided with a lip; a red paraffin wax plug made of a wax material that melts at a predetermined temperature and has an outwardly facing peripheral surface with a groove; a retaining plug within the neck for holding the wax plug within the neck of the bottle, the retaining plug formed by an annular member having an outer facing peripheral surface formed with a groove for mating with the lip in the neck, and an inner facing peripheral surface defining a center opening in which the wax plug is held and having an inwardly extending lip that engages within the groove in the wax plug; and a removable closure cap in covering relation to the opening.

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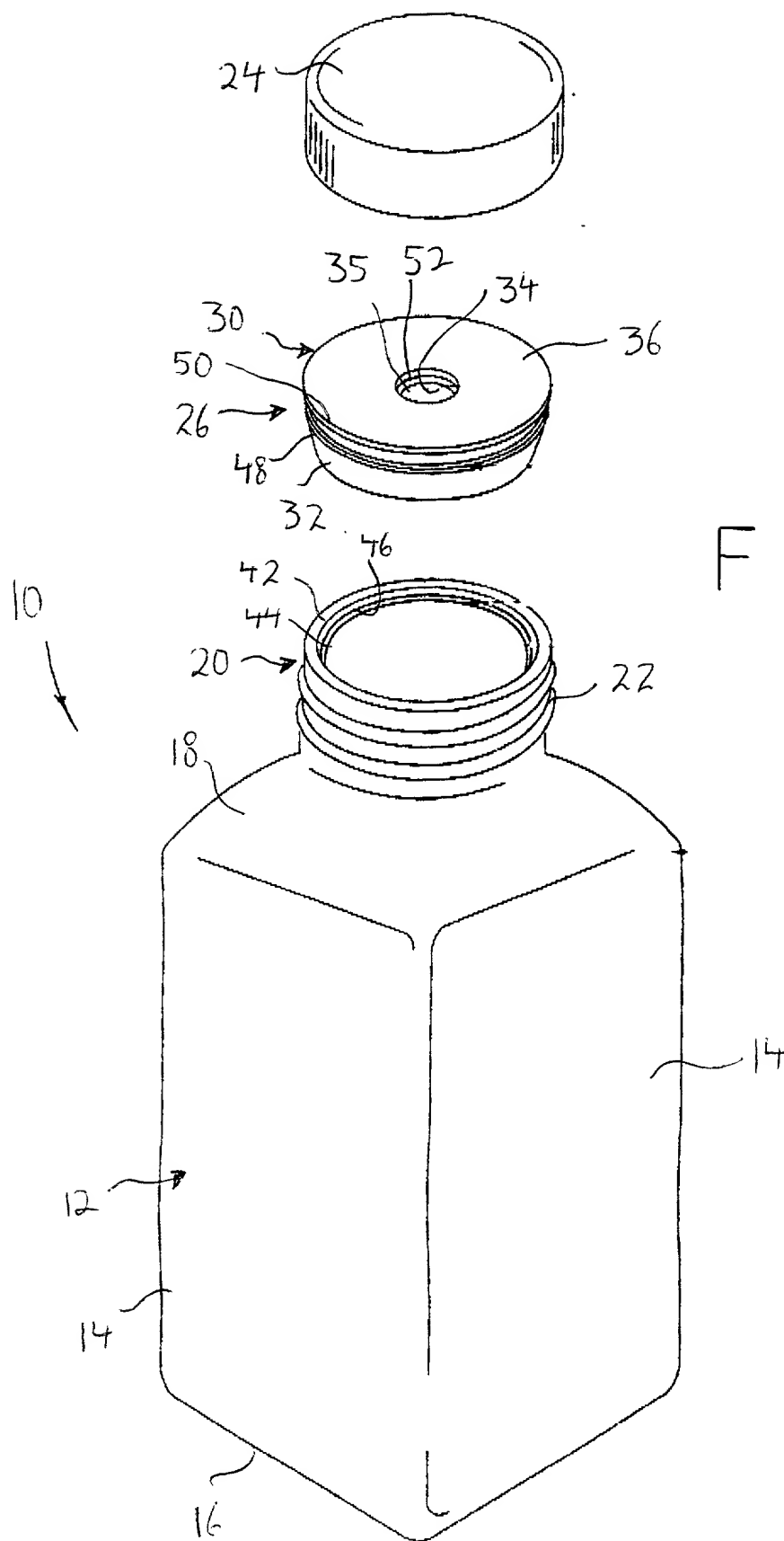


FIG. 1

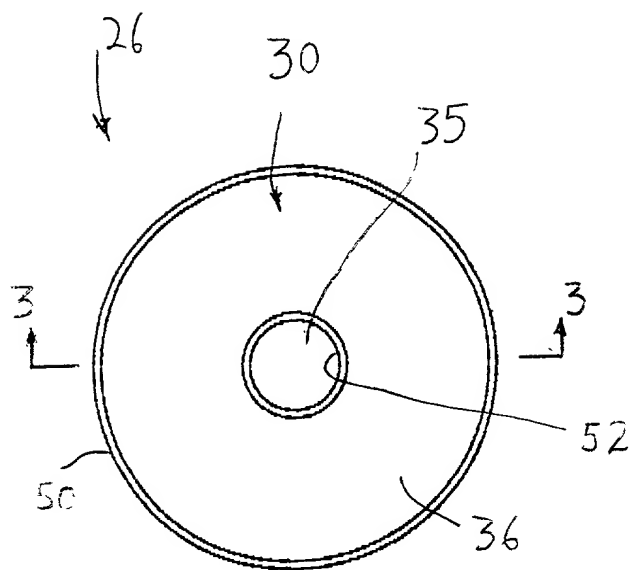


FIG. 2

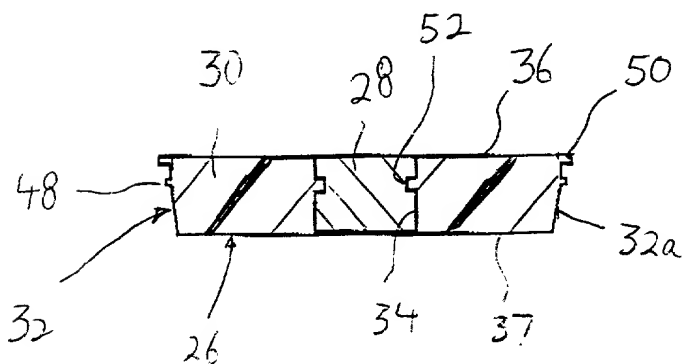


FIG. 3

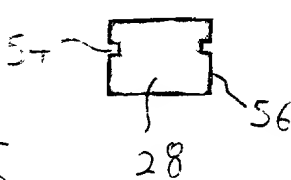


FIG. 4

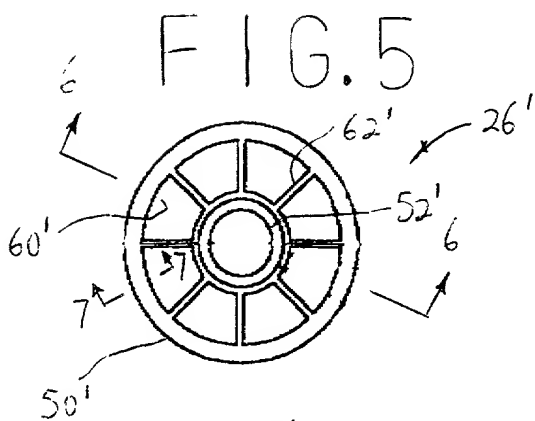


FIG. 5

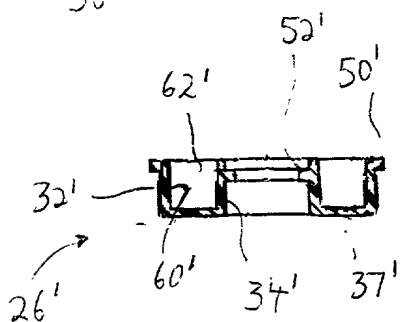


FIG. 6

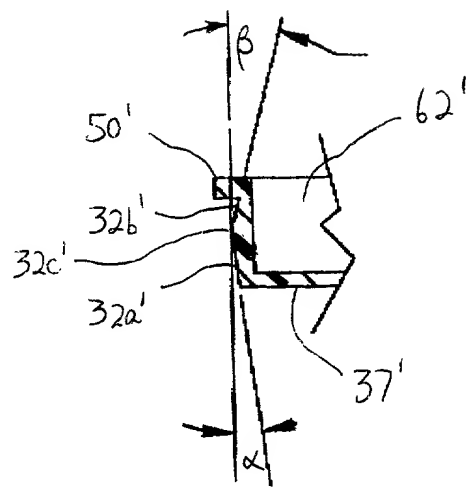


FIG. 7

UTILITY PATENT  
OR DESIGNDECLARATION AND POWER OF ATTORNEY  
(Sole or Joint)

ATTORNEY'S DOCKET NO.

337/1/003

As a below named inventor, I declare that I believe I am the original, first and sole inventor if only one name is listed at Item 201 below, or a joint inventor if plural names are listed below at Items 201 et seq., of the subject matter which is claimed and for which a patent is sought on the invention entitled: ..... **PORTABLE DISPENSING BOTTLE WITH DISSOLVABLE WAX PLUG AT INLET** ..... which is described and claimed in

☒ the attached specification ☐ the specification in application Serial No. .... filed .....  
(for declaration not accompanying application papers)  
and (if applicable) amended on .....  
☐ international (PCT) application No. .... filed ..... and as amended on ..... (if any).

I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information of which I am aware which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

I hereby claim the benefit of priority, under Title 35, United States Code, § 119, of any foreign application(s) for patent or inventor's certificate listed in Item 103 below and have also identified in Item 103 below any foreign application(s) for patent or inventor's certificate having a filing date before that of the application for which priority is claimed.

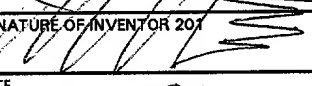
I hereby claim the benefit, under Title 35, United States Code, § 120, of any U.S. application(s) listed in Item 105 below. If this application is a continuation-in-part, insofar as the subject matter of any of the claims thereof is not disclosed in the prior U.S. application(s) identified in Item 105 below in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior U.S. application(s) identified in Item 105 below and the national or PCT international filing date of this application.

FOREIGN APPLICATION(S), IF ANY, FILED WITHIN 12 (6 if a Design) MONTHS PRIOR TO THE FILING DATE OF THIS APPLICATION			
COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 35 U.S.C. § 119
			YES _____ NO _____
			YES _____ NO _____
ALL FOREIGN APPLICATIONS, IF ANY, FILED MORE THAN 12 (6 if a Design) MONTHS PRIOR TO THE FILING DATE OF THIS APPLICATION			
1 THIS APPLICATION IS A :		SERIAL NO.	FILED
0 <input checked="" type="checkbox"/> CONTINUATION	<input type="checkbox"/> CONTINUATION-IN-PART	<input type="checkbox"/> ABANDONED	<input type="checkbox"/> PENDING
5 <input type="checkbox"/> DIVISION	OF PRIOR U.S. APPLICATION		<input type="checkbox"/> PATENTED

**POWER OF ATTORNEY:** As a named inventor, I hereby appoint **RICHARD M. GOLDBERG, ESQ.**, Registration Number 28,215, to prosecute this application and transact all business in the Patent and Trademark Office connected therewith, and request that all correspondence and telephone inquiries be sent to Richard M. Goldberg, Esq., 25 East Salem Street, Suite 419, Hackensack, New Jersey 07601, (201) 343-7775.

FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME
201	SCHMIDT	KEVIN	
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	WYCKOFF	NEW JERSEY	UNITED STATES
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202	LAST NAME		
202	CITY OR OTHER LOCATION	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
202	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY
			ZIP CODE
203	FULL NAME OF INVENTOR	FIRST NAME	MIDDLE NAME
203	LAST NAME		
203	CITY OR OTHER LOCATION	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
203	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY
			ZIP CODE

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

SIGNATURE OF INVENTOR 201	SIGNATURE OF INVENTOR 202	SIGNATURE OF INVENTOR 203
		
DATE 11-17-99	DATE	DATE

Applicant or Patentee: Kevin SCHMIDT Attorney's  
Serial or Patent No. : UNASSIGNED Docket No.: 337/1/003  
Filed or Issued : NOVEMBER 17, 1999  
For : PORTABLE DISPENSING BOTTLE WITH DISSOLVABLE WAX PLUG AT INLET

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY  
STATUS (37 CFR 1.9(f) and 1.27(b) - INDEPENDENT INVENTOR

As a below-named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR 1.9(c) for purposes of paying reduced fees under Section 41 (a) and (b) of Title 35, United States Code, to the Patent and Trademark Office with regard to the invention, entitled  
PORTABLE DISPENSING BOTTLE WITH DISSOLVABLE WAX PLUG AT INLET  
described in

[ ☒ ] the specification filed herewith  
[ ] application serial no. \_\_\_\_\_, filed \_\_\_\_\_  
[ ] patent no. \_\_\_\_\_, issued \_\_\_\_\_

I have not assigned, granted, conveyed or licensed and am under no obligation under contract or law to assign, grant, convey or license, any rights in the invention to any person who could not be classified as an independent inventor under 37 CFR 1.9(c) if that person had made the invention, or to any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

[ ☒ ] no such person, concern, or organization  
[ ] persons, concerns or organizations listed below\*

\*NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

FULL NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
[ ] INDIVIDUAL [ ] SMALL BUSINESS CONCERN [ ] NONPROFIT ORGANIZATION

FULL NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
[ ] INDIVIDUAL [ ] SMALL BUSINESS CONCERN [ ] NONPROFIT ORGANIZATION

FULL NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
[ ] INDIVIDUAL [ ] SMALL BUSINESS CONCERN [ ] NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

Kevin SCHMIDT

NAME OF INVENTOR

NAME OF INVENTOR

NAME OF INVENTOR

Signature of Inventor

Signature of Inventor

Signature of Inventor

Date

Date

Date